

#9

re-run



1600

RAW SEQUENCE LISTING

DATE: 05/08/2003

PATENT APPLICATION: US/09/769,952

TIME: 10:08:03

Input Set : A:\US09769952.raw

Output Set: N:\CRF4\05082003\I769952.raw

1 <110> APPLICANT: LEXICON GENETICS INCORPORATED
 2 <120> TITLE OF INVENTION: Novel Human Enzymes and Polynucleotides
 3 Encoding the Same
 4 <130> FILE REFERENCE: LEX-0118-PCT
 5 <140> CURRENT APPLICATION NUMBER: US/09/769,952
 6 <141> CURRENT FILING DATE: 2001-01-25
 7 <150> PRIOR APPLICATION NUMBER: US 60/179,000
 8 <151> PRIOR FILING DATE: 2000-01-28
 9 <160> NUMBER OF SEQ ID NOS: 15
 10 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 12 <210> SEQ ID NO: 1
 13 <211> LENGTH: 831
 14 <212> TYPE: DNA
 15 <213> ORGANISM: Homo sapiens
 16 <400> SEQUENCE: 1

17	atgacctctt	tccgcttgcc	cctcatccag	cttcagattt	cttccatcaa	atcagataac	60
18	gtcactcgcg	cttgtagctt	catccgggag	gcagcaacgc	aaggagccaa	aatagtttct	120
19	ttgccggaat	gctttaattc	tccatatgga	gcgaaatatt	ttcctgaata	tgcagagaaa	180
20	attcctgggtg	aatccacaca	gaagctttct	gaagtagcaa	aggaatgcag	catatatctc	240
21	attggaggct	ctatccctga	agaggatgct	gggaaattat	ataacacctg	tgctgtgttt	300
22	gggcctgatg	gaactttact	agcaaagtat	agaaagatcc	atctgtttga	cattgatgtt	360
23	cctggaaaaa	ttacatttca	agaatctaaa	acattgagtc	cgggtgatag	tttctccaca	420
24	tttgatactc	cttactgcag	agtgggtctg	ggcatctgct	acgacatgcg	gtttgcagag	480
25	cttgacaaaa	tctacgcaca	gagaggctgc	cagctgttgg	tatatccagg	agcttttaat	540
26	ctgaccactg	gaccagccca	ttggggagta	cttcagcgaa	gccgggctgt	tgataatcag	600
27	gtgtatgtgg	ccacagcctc	tcctgcccgg	gatgacaaag	cctcctatgt	tgcttgggga	660
28	cacagcaccg	tgggtgaaccc	ttggggggag	gttctagcca	aagctggcac	agaagaagca	720
29	atcgtgtatt	cagacataga	cctgaagaag	ctggctgaaa	tacgccagca	aatccccgtt	780
30	tttagacaga	agcgatcaga	cctctatgct	gtggagatga	aaaagcccta	a	831

32 <210> SEQ ID NO: 2
 33 <211> LENGTH: 276
 34 <212> TYPE: PRT
 35 <213> ORGANISM: Homo sapiens
 36 <400> SEQUENCE: 2

37	Met	Thr	Ser	Phe	Arg	Leu	Ala	Leu	Ile	Gln	Leu	Gln	Ile	Ser	Ser	Ile
38	1				5					10					15	
39	Lys	Ser	Asp	Asn	Val	Thr	Arg	Ala	Cys	Ser	Phe	Ile	Arg	Glu	Ala	Ala
40				20					25				30			
41	Thr	Gln	Gly	Ala	Lys	Ile	Val	Ser	Leu	Pro	Glu	Cys	Phe	Asn	Ser	Pro
42			35				40					45				
43	Tyr	Gly	Ala	Lys	Tyr	Phe	Pro	Glu	Tyr	Ala	Glu	Lys	Ile	Pro	Gly	Glu
44		50					55				60					
45	Ser	Thr	Gln	Lys	Leu	Ser	Glu	Val	Ala	Lys	Glu	Cys	Ser	Ile	Tyr	Leu

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46	65	70	75	80
47	Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr			
48		85	90	95
49	Cys Ala Val Phe Gly Pro Asp Gly Thr Leu Leu Ala Lys Tyr Arg Lys			
50		100	105	110
51	Ile His Leu Phe Asp Ile Asp Val Pro Gly Lys Ile Thr Phe Gln Glu			
52		115	120	125
53	Ser Lys Thr Leu Ser Pro Gly Asp Ser Phe Ser Thr Phe Asp Thr Pro			
54		130	135	140
55	Tyr Cys Arg Val Gly Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu			
56		145	150	155
57	Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro			
58		165	170	175
59	Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln			
60		180	185	190
61	Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro			
62		195	200	205
63	Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val			
64		210	215	220
65	Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala			
66		225	230	235
67	Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln			
68		245	250	255
69	Gln Ile Pro Val Phe Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu			
70		260	265	270
71	Met Lys Lys Pro			
72		275		
74	<210> SEQ ID NO: 3			
75	<211> LENGTH: 480			
76	<212> TYPE: DNA			
77	<213> ORGANISM: Homo sapiens			
78	<400> SEQUENCE: 3			
79	atgtcatgga ggatttcccc tgccacacca tgctgtaggg agttaacttt tcatttgtgc			60
80	attttctgtt tggaaacagc ttactgcaga gtgggtcttg gcattctgcta cgacatgcgg			120
81	tttgcagagc ttgcacaaat ctacgcacag agaggctgcc agctgttggt atatccagga			180
82	gcttttaatc tgaccactgg accagcccat tgggagttac ttcagcgaag ccgggctgtt			240
83	gataatcagg tgtatgtggc cacagcctct cctgcccggg atgacaaagc ctcttatgtt			300
84	gcctggggac acagcaccgt ggtgaacct tggggggagg ttctagccaa agctggcaca			360
85	gaagaagcaa tcgtgtattc agacatagac ctgaagaagc tggctgaaat acgccagcaa			420
86	atccccggtt ttgacagaa gcgatcagac ctctatgctg tggagatgaa aaagccctaa			480
88	<210> SEQ ID NO: 4			
89	<211> LENGTH: 159			
90	<212> TYPE: PRT			
91	<213> ORGANISM: Homo sapiens			
92	<400> SEQUENCE: 4			
93	Met Ser Trp Arg Ile Ser Pro Ala Thr Pro Cys Cys Arg Glu Leu Thr			
94	1 5 10 15			
95	Phe His Leu Cys Ile Phe Cys Leu Glu Thr Ala Tyr Cys Arg Val Gly			
96	20 25 30			

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97   Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr
98       35                     40                     45
99   Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
100      50                     55                     60
101   Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
102      65                     70                     75                     80
103   Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
104                      85                     90                     95
105   Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
106                      100                    105                    110
107   Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
108                      115                    120                    125
109   Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
110                      130                    135                    140
111   Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro
112                      145                    150                    155
114 <210> SEQ ID NO: 5
115 <211> LENGTH: 366
116 <212> TYPE: DNA
117 <213> ORGANISM: Homo sapiens
118 <400> SEQUENCE: 5
119   atgcggtttg cagagcttgc acaaattctac gcacagagag gctgccagct gttggtatat      60
120   ccaggagctt ttaattctgac cactggacca gccattggg agttacttca gcgaagccgg      120
121   gctgttgata atcaggtgta tgtggccaca gcctctcctg cccgggatga caaagcctcc      180
122   tatgttgctt ggggacacag caccgtggtg aacccttggg gggagggttct agccaaagct      240
123   ggcacagaag aagcaatcgt gtattcagac atagacctga agaagctggc tgaaatacgc      300
124   cagcaaattcc ccgttttttag acagaagcga tcagacctct atgctgtgga gatgaaaaag      360
125   ccctaa                                           366
127 <210> SEQ ID NO: 6
128 <211> LENGTH: 121
129 <212> TYPE: PRT
130 <213> ORGANISM: Homo sapiens
131 <400> SEQUENCE: 6
132   Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln
133       1                     5                     10                     15
134   Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His
135      20                     25                     30
136   Trp Glu Leu Leu Gln Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val
137      35                     40                     45
138   Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp
139      50                     55                     60
140   Gly His Ser Thr Val Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala
141      65                     70                     75                     80
142   Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu
143                      85                     90                     95
144   Ala Glu Ile Arg Gln Gln Ile Pro Val Phe Arg Gln Lys Arg Ser Asp
145                      100                    105                    110
146   Leu Tyr Ala Val Glu Met Lys Lys Pro
147                      115                    120

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149 <210> SEQ ID NO: 7
150 <211> LENGTH: 507
151 <212> TYPE: DNA
152 <213> ORGANISM: Homo sapiens
153 <400> SEQUENCE: 7
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155      attttctggt tggaacagc ttactgcaga gtgggtctgg gcatctgcta cgacatgcgg      120
156      ttgacagagc ttgcacaaat ctacgcacag agaggctgcc agctgttggt atatccagga      180
157      gcttttaatc tgaccactgg accagcccat tgggagttac ttcagcgaag ccgggctggt      240
158      gataatcagg tgtatgtggc cacagcctct cctgcccggg atgacaaagc ctctatggt      300
159      gcctggggac acagcacctg ggtgaaccct tggggggagg ttctagccaa agctggcaca      360
160      gaagaagcaa tcgtgtattc agacatagac ctgaagaagc tggctgaaat acgccagcaa      420
161      atccccgttt ttagacagaa gcgaaatatt ttctgaata tgcagagaaa attcctgggtg      480
162      aatccacaca gaagctttct gaagtag      507
164 <210> SEQ ID NO: 8
165 <211> LENGTH: 168
166 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
168 <400> SEQUENCE: 8
169      Met Ser Trp Arg Ile Ser Pro Ala Thr Pro Cys Cys Arg Glu Leu Thr
170      1          5          10          15
171      Phe His Leu Cys Ile Phe Cys Leu Glu Thr Ala Tyr Cys Arg Val Gly
172      20          25          30
173      Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr
174      35          40          45
175      Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
176      50          55          60
177      Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
178      65          70          75          80
179      Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
180      85          90          95
181      Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
182      100          105          110
183      Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
184      115          120          125
185      Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
186      130          135          140
187      Arg Gln Lys Arg Asn Ile Phe Leu Asn Met Gln Arg Lys Phe Leu Val
188      145          150          155          160
189      Asn Pro His Arg Ser Phe Leu Lys
190      165
192 <210> SEQ ID NO: 9
193 <211> LENGTH: 393
194 <212> TYPE: DNA
195 <213> ORGANISM: Homo sapiens
196 <400> SEQUENCE: 9
197      atgcggtttg cagagcttgc acaaactctac gcacagagag gctgccagct gttggtatat      60
198      ccaggagctt ttaatctgac cactggacca gccattggg agttacttca gcgaagccgg      120
199      gctgttgata atcaggtgta tgtggccaca gcctctctcg cccgggatga caaagcctcc      180

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200      tatgttgctt ggggacacag caccgtggtg aacccttggg gggagggttct agccaaagct      240
201      ggcacagaag aagcaatcgt gtattcagac atagacctga agaagctggc tgaaatacgc      300
202      cagcaaatcc ccgttttttag acagaagcga aatattttcc tgaatatgca gagaaaattc      360
203      ctggtgaatc cacacagaag ctttctgaag tag      393
205 <210> SEQ ID NO: 10
206 <211> LENGTH: 130
207 <212> TYPE: PRT
208 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 10
210      Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln
211      1          5          10          15
212      Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His
213      20          25          30
214      Trp Glu Leu Leu Gln Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val
215      35          40          45
216      Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp
217      50          55          60
218      Gly His Ser Thr Val Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala
219      65          70          75          80
220      Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu
221      85          90          95
222      Ala Glu Ile Arg Gln Gln Ile Pro Val Phe Arg Gln Lys Arg Asn Ile
223      100         105         110
224      Phe Leu Asn Met Gln Arg Lys Phe Leu Val Asn Pro His Arg Ser Phe
225      115         120         125
226      Leu Lys
227      130
229 <210> SEQ ID NO: 11
230 <211> LENGTH: 459
231 <212> TYPE: DNA
232 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 11
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235      gtcactcgcg cttgtagctt catccgggag gcagcaacgc aaggagccaa aatagtttct      120
236      ttgccggaat gctttaattc tccatatgga gcgaaatatt ttcctgaata tgcagagaaa      180
237      attcctggtg aatccacaca gaagctttct gaagtagcaa aggaatgcag catatatctc      240
238      attggaggct ctatccctga agaggatgct gggaaattat ataacacctg tgctgtgttt      300
239      gggcctgatg gaactttact agcaaagtat agaaagatcc atctgtttga cattgatgtt      360
240      cctggaaaaa ttacatttca agaattctaaa acattgagtc cgggtgatag tttctccaca      420
241      tttgatactc gtatgtacca gataagtttg cctcttttag      459
243 <210> SEQ ID NO: 12
244 <211> LENGTH: 152
245 <212> TYPE: PRT
246 <213> ORGANISM: Homo sapiens
247 <400> SEQUENCE: 12
248      Met Thr Ser Phe Arg Leu Ala Leu Ile Gln Leu Gln Ile Ser Ser Ile
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250      Lys Ser Asp Asn Val Thr Arg Ala Cys Ser Phe Ile Arg Glu Ala Ala
251      20          25          30

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/769,952

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